

FEB 19 1982

DMS 1908

**U.S. DEPARTMENT OF LABOR**  
Occupational Safety and Health Administration

Form Approved  
OMB No. 44-R1387

# MATERIAL SAFETY DATA SHEET

FP-91 A  
PENETRANT

Required under USDL Safety and Health Regulations for Ship Repairing,  
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

*Page 3*

## SECTION I

MANUFACTURER'S NAME <b>MET-L-CHEK COMPANY</b>		EMERGENCY TELEPHONE NO. <b>213-394-0222</b>
ADDRESS (Number, Street, City, State, and ZIP Code) <b>1639 Euclid Street, Santa Monica, CA 90404</b>		
CHEMICAL NAME AND SYNONYMS <b>NA</b>		TRADE NAME AND SYNONYMS <b>FP-91 A PENETRANT</b>
CHEMICAL FAMILY <b>NA</b>	FORMULA <b>NA</b>	

## SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
NONE					

## SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	<b>417 F</b>	SPECIFIC GRAVITY (H <sub>2</sub> O=1)	<b>0.86</b>
VAPOR PRESSURE (mm Hg.)	<b>1</b>	PERCENT, VOLATILE BY VOLUME (%)	<b>about 70</b>
VAPOR DENSITY (AIR=1)	<b>about 6.7</b>	EVAPORATION RATE (_____ =1)	<b>Unknown</b>
SOLUBILITY IN WATER	<b>emulsifiable</b>		
APPEARANCE AND ODOR	<b>light greenish yellow liquid, pleasant odor</b>		

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	<b>over 200 F (COC)</b>	FLAMMABLE LIMITS	<b>LeI</b>	<b>UeI</b>
EXTINGUISHING MEDIA	<b>foam, CO<sub>2</sub>, dry chemical, water fog</b>			
SPECIAL FIRE FIGHTING PROCEDURES	<b>NONE</b>			
UNUSUAL FIRE AND EXPLOSION HAZARDS	<b>NONE</b>			

## SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

200 PPM (suggested)

EFFECTS OF OVEREXPOSURE

May cause signs and symptoms of central nervous system depression such as headache, dizziness, loss of appetite and weakness.

EMERGENCY AND FIRST AID PROCEDURES

Inhalation: Remove to fresh air, maintain respiration

Eyes: Flush with plenty of water

Skin: Remove by wiping, wash with soap and water

## SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

Keep away from sparks or open flames

INCOMPATIBILITY (Materials to avoid)

Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS

Incomplete combustion will release CO

HAZARDOUS

POLYMERIZATION

MAY OCCUR

WILL NOT OCCUR

X

CONDITIONS TO AVOID

## SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Remove sources of ignition. Avoid prolonged breathing of vapors. Avoid contact with skin and eyes.

WASTE DISPOSAL METHOD

Treat as any inflammable liquid. Haul away for safe outdoor disposal, or haul away by oil reclaimers. Use oil sewer if available.

## SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)

None under proper conditions of use.

VENTILATION

LOCAL EXHAUST

When material is sprayed

SPECIAL

MECHANICAL (General)

As required to maintain TLV

OTHER

PROTECTIVE GLOVES

None

EYE PROTECTION

OTHER PROTECTIVE EQUIPMENT

None

## SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store out of direct rays of sun. Do not expose to fire.

OTHER PRECAUTIONS

Keep containers closed and clearly labeled.



... 1639 Euclid Street ... Santa Monica, Ca ... 90404 ... (213) 450-1111

August 8, 1979

M.J. Veneroso  
Dept. C1-725 (52-11)  
Materials Handling & Packaging  
Engineering  
Douglas Aircraft Company  
3855 Lakewood Boulevard  
Long Beach, California 90846

*DMS 1908*

Dear M.J. Veneroso:

Responding to your August 7, 1979 letter. FP-91A and FP-92 liquid penetrants are not hazardous materials under Title 49 CFR and IATA. The flash point of both materials are above 200°F.

Copies of OSHA Data Sheets for each material are attached.

Please advise if you wish further information.

Very truly yours,

Met-L-Chek Company

Phillip J. Maddex

PJM/ft